

ABSTRACT OF THE DISCLOSURE

Processing methods that provide food or food materials including high functional ingredients contents are disclosed. By using seeds of one or more of wheat, barley, oats and rye soaked in water or hot water, or the processed products of germinated barley or malt as food materials, without using functional ingredients like amino acids as additives, functional ingredients contents like GABA or targeted other free amino acids in foods are increased during the manufacturing process of foods. Also, for not only food or food products with processed products of one or more of wheat, barley, oats and rye but also food or food products with non-processed wheat, barley, oats and rye or food or food products with usual raw material of grains, it is provided that food or food products included high functional ingredients contents or their processing methods by controlling the manufacturing process of food or food products.

By including processed product of one or more of wheat, barley, oats and rye like soaked products of malt or germinated barley or seeds of one or more of wheat, barley, oats and rye which are controlled with the germination day depending on the targeted free amino acids or dietary fibers to foods materials, free amino acids contents or GABA content can be increased during the fermentation process or the aging process of the manufacturing process of food or food products. As a result, food or food products including increased free amino acids and GABA contents without using amino acids or GABA as additives and their manufacturing processes are provided. Also, functional ingredients contents are increased by controlling temperature during the fermentation process or the aging process for manufacturing food or food products with non-

processed barley like barley flour in usual materials of foods (not using processed products of one or more of wheat, barley, oats and rye), or food or food products with usual materials of grains.